

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A hybrid drive for motor vehicles having an internal combustion engine (7), an electric motor (5), a generator (8) and a branching gearbox (6) which is arranged between the internal combustion engine, the generator and the electric motor, each having a gearbox connection, that is to say a gearbox input and output, for the internal combustion engine, the generator and the electric motor, which is positively coupled via a drive train (4) to driven wheels (2) of the motor vehicle, with the rotation speed (nA) of the drive train being determined, in order to control the hybrid drive, by means of a sensor arrangement which has separate sensors (13 to 17) for determination of measured values of the rotation speed (nV) of the internal combustion engine, the rotation speed (nG) of the generator, the rotation speed (nE) of the electric motor, and at least one of the rotation speed (nR) of predetermined driven vehicle wheels (2) and/or the rotation speed (nR*) of further vehicle wheels (1), with a rotation speed which can be verified from the abovementioned measured values in at least two different ways which are asymmetrically redundant relative to one another being used as the rotation speed (nA) of the drive train.

2. (Currently Amended) The hybrid drive as claimed in claim 1, characterized in that wherein a measured rotation speed (nE) of the electric motor is used as the rotation speed (nA) when a rotation speed of the electric motor (nE_b) calculated from the rotation speeds of the internal combustion engine (nV) and of the generator (nG) is plausible and adequately matches the measured rotation speed of the electric motor (nE) and, furthermore, adequate matching of the measured rotation speed of the electric motor (nE) is provided

with a rotation speed of the drive train (nA_b) calculated from the rotation speeds (nR) of predetermined driven vehicle wheels (2).

3. (Currently Amended) The hybrid drive as claimed in claim 1, characterized in that wherein a measured rotation speed of the electric motor (nE) is used as the rotation speed of the drive train (nA) when a rotation speed of the electric motor (nE_b) calculated from the rotation speeds of the internal combustion engine and the generator, as well as a rotation speed of the drive train (nA^*_b) calculated from the rotation speeds of further vehicle wheels (1) are plausible, and the measured rotation speed of the electric motor (nE) adequately matches both the abovementioned calculated rotation speed of the electric motor (nE_b) and the abovementioned calculated rotation speed of the drive train (nA^*_b).

4. (Currently Amended) The hybrid drive as claimed in claim 3 2, characterized in that wherein a fault signal is additionally produced in order to indicate that the value of the rotation speed of the drive train (nA_b) calculated from the rotation speeds of predetermined driven vehicle wheels is incorrect.

5. (Currently Amended) The hybrid drive as claimed in claim 1, characterized in that wherein a rotation speed of the drive train (nA_b) calculated from the rotation speeds of predetermined driven vehicle wheels is used as the rotation speed of the drive train (nA) when this rotation speed adequately matches a rotation speed of the drive train (nA^*_b) calculated from the rotation speeds of further vehicle wheels (1), and a rotation speed of the electric motor (nE_b) calculated from the rotation speeds of the internal combustion engine and the generator is plausible and, furthermore, there is no adequate match between the measured rotation speed of the electric motor (nE) and a rotation speed of the electric motor (nE_b) calculated from the rotation speeds of the internal combustion engine and the generator, and a rotation speed of the drive train (nA_b) calculated from the rotation speeds of predetermined drive wheels (2).

6. (Currently Amended) The hybrid drive as claimed in claim 5,
~~characterized in that wherein~~ a fault signal is produced in order to indicate that
the measured rotation speed of the electric motor (nE) is incorrect.

7. (Currently Amended) The hybrid drive as claimed in claim 1,
~~characterized in that wherein~~ a rotation speed of the electric motor (nE_b)
calculated from the rotation speeds of the internal combustion engine and the
generator is used as the rotation speed of the drive train (nA) when the
calculated rotation speed of the electric motor (nE_b) as well as a rotation speed of
the drive train (nA^*_b) calculated from the rotation speeds of further vehicle
wheels (1) are plausible and adequately match one another, but a rotation speed
of the drive train (nAb) calculated from the rotation speeds of predetermined
drive wheels (2) is at least one of not plausible and/or there is no match between
a measured rotation speed of the electric motor (nE) and at least one of the
calculated rotation speed of the electric motor (nE_b) and/or the rotation speed of
the drive train (nA^*_b) calculated from the rotation speeds of further vehicle
wheels (1).

8. (Currently Amended) The hybrid drive as claimed in claim 7,
~~characterized in that wherein~~ fault signals are produced in order to indicate that
the measured rotation speed of the electric motor (nE) as well as the rotation
speed of the drive train (nAb) calculated from the rotation speeds of
predetermined driven wheels (2) of the vehicle are incorrect.

9. (Currently Amended) The hybrid drive as claimed in claim 1,
~~characterized in that wherein~~, if there is no verification of the rotation speed to
be determined for the drive train (nA), an emergency signal is produced and/or
the internal combustion engine (7) and the electric motor (5) are/is stopped.

10.-14. (Cancelled)

15. (New) A hybrid drive for motor vehicles having an internal combustion engine, an electric motor, a generator and a branching gearbox which is arranged between the internal combustion engine, the generator and the electric motor, each having a gearbox connection including an input and output for the internal combustion engine, the generator and the electric motor, wherein said gearbox connection is positively coupled via a drive train to driven wheels of the motor vehicle and wherein the generator and the electric motor are controlled by a control arrangement as a function of one of a nominal and actual value comparison of a ratio of rotation speeds of the internal combustion engine and rotation speeds of the drive train and of the driven wheels, respectively.

16. (New) The hybrid drive as claimed in Claim 15, wherein the nominal value is predetermined on a parametric basis.

17. (New) The hybrid drive as claimed in Claim 16, wherein the parametric basis is a function of at least one of positions of control elements operated by the driver and signals from a sensor system which detects parameters of a roadway.

18. (New) The hybrid drive as claimed in Claim 16, wherein the positions of control elements include at least one of a gas pedal and a brake pedal.

19. (New) The hybrid drive as claimed in Claim 16, wherein the signals from a sensor system which detects parameters of a roadway include upward and downward gradients.